

FORM 1449*

**INFORMATION DISCLOSURE STATEMENT
IN AN APPLICATION**

(Use several sheets if necessary)

Docket Number
30794.32USU2

Application Number
09/105,574

Applicant
Cyrus R. Safinya, et al.

Filing Date
June 26, 1998

Group
1633

Sheet 1 of 4

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
					YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

TCP		Lipowski, R., "The Conformation of Membranes," <i>Nature</i> , February 1991, 349:475-81. (Exhibit 1)
		Walker, S. et al., "Encapsulation of Bilayer Vesicles by Self Assembly," <i>Nature</i> , May 1997, 387:61-4. (Exhibit 2)
		Lasic, D., "Liposomes Within Liposomes," <i>Nature</i> , May 1997, 387:26-7. (Exhibit 3)
		Raedler, J. et al., "Structure of DNA-Cationic Liposome Complexes: DNA Intercalation in Multilamellar Membranes in Distinct Interhelical Packing Regimes," <i>Science</i> , February 1997, 275:810-4. (Exhibit 4)
		Evans, E. A. and V. A. Parsegian, "Thermal-mechanical Fluctuations Enhance Repulsion Between Bimolecular Layers," <i>Proc. Natl. Acad. Sci. USA</i> , October 1986, 83:7132-6. (Exhibit 5)
		Kamien, Randall D. and David R. Nelson, "Defects in Chiral Columnar Phases: Tilt-grain Boundaries and Iterated Moire Maps," <i>Physical Review E</i> , January 1996, 53(1):650-66. (Exhibit 6)
		Safinya, Cyrus R. et al., "Steric Interaction in a Model Mutimembrane System: A Synchrotron X-Ray Study," <i>Physical Review Letters</i> , November 24, 1986, 57(21):2718-21. (Exhibit 7)
		Helfrich W., "Steric Interaction of Fluid Membranes in Multilayer Systems," <i>Z. Naturforsch</i> , 1978, 33:305-15. (Exhibit 8)
		Selinger, Jonathan V. and Robijn F. Bruinsma, "Hexagonal and Nematic Phases of Chains. I. Correlation Functions," <i>Physical Review A</i> , March 15, 1991, 43(6):2910-21. (Exhibit 9)
TCP		Boltenhagen, Ph. et al., "Focal Conic Domains With Positive Gaussian Curvature and Saddle-splay Rigidity of Smectic L _a Phases," <i>Physical Review A</i> , August 15, 1992, 46(4):R1743-6. (Exhibit 10)

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FORM 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number 30794.32USU2	Application Number 09/105,577
	Applicant Cyrus R. Safinya, et al.	
	Filing Date June 26, 1998	Group Art Unit 1633
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↑		Safinya, Cyrus R., "Rigid Fluctuating Surfaces: A Series of Synchrotron X-ray Scattering Studies of Interacting Stacked Membranes," <i>Phase Transitions in Soft Condensed Matter</i> , Tormod Riste and Davud Sherrington, ed., Plenum Publishing Corporation, 1989, 249-70. (Exhibit 12)
		Roux, D. and Cyrus R. Safinya, "A Synchrotron X-ray Study of Competing Undulation and Electrostatic Interlayer Interactions in Fluid Multimembrane Lyotropic Phases," <i>J Phys. France</i> , 1988, 49:307-18. (Exhibit 13)
		Perkins, Thomas T. et al., "Direct Observation of Tube-Like Motion of a Single Polymer Chain," <i>Science</i> , May 6, 1994, 264:819-26. (Exhibit 14)
		Smith, Steven B. et al., "Direct Mechanical Measurements of the Elasticity of Single DNA Molecules by Using Magnetic Beads," <i>Science</i> , November 13, 1992, 258:1122-6. (Exhibit 15)
		Sternberg, Brigitte et al., "New Structures in Complex Formation Between DNA and Cationic Liposomes Visualized by Freeze-Fracture Electron Microscopy," <i>FEBS Letters</i> , 1994, 356:361-6. (Exhibit 16)
		Gustafsson, Jones et al., "Complexes Between Cationic Liposomes and DNA Visualized by Cryo-TEM," <i>Biochimica et Biophysica Acta</i> , 1995, 1235:305-12. (Exhibit 17)
		Gershon, Hezi et al., "Mode of Formation and Structural Features of DNA-Cationic Liposome Complexes Used for Transfection," <i>Biochemistry</i> , 1993, 32:7143-51. (Exhibit 18)
		Kenworthy, A. K. et al., "Range and Magnitude of the Steric Pressure Between Bilayers Containing Phospholipids with Covalently Attached Poly(ethylene glycol)," <i>Biophysical Journal</i> , May 1995, 68:1921-36. (Exhibit 19)
		Warriner, Heidi E. et al., "Lamellar Biogels: Fluid-Membrane-Based Hydrogels Containing Polymer Lipids," <i>Science</i> , February 16, 1996, 271:969-73. (Exhibit 20)
		Ligoure, C. et al., "Polymer Induced Phase Separation in Lyotropic Smectics," <i>Physical Review Letters</i> , November 22, 1993, 71(21):3600-3. (Exhibit 21)
TCP		Sackmann, E., "Supported Membranes: Scientific and Practical Applications," <i>Science</i> , January 5, 1996, 271:43-8. (Exhibit 22)

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FORM 1449*

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TICP		Reich, Ziv et al., "Liquid-Crystalline Mesophases of Plasmid DNA in Bacteria," <i>Science</i> , Jun 3, 1994, 264:1460-3. (Exhibit 23)
		Livolant, F. et al., "The Highly Concentrated Liquid-Crystalline Phase of DNA is Columnar Hexagonal," <i>Nature</i> , June 29, 1989, 339:724-6. (Exhibit 24)
		Bloomfield, Victor A., "Condensation of DNA by Multivalent Cations: Considerations on Mechanism," <i>Biopolymers</i> , 1991, 31:1471-81. (Exhibit 25)
		Marshall, Eliot, "Gene Therapy's Growing Pains," <i>Science</i> , August 25, 1995, 269:1050-5. (Exhibit 26)
		Marshall, Eliot, "Less Hype, More Biology Needed for Gene Therapy," <i>Science</i> , December 15, 1995, 270:1751. (Exhibit 27)
		Lasic, D. D. and N. S. Templeton, "Liposomes in Gene Therapy," <i>Advanced Drug Delivery Reviews</i> , 1996, 20:221-66. (Exhibit 28)
		Nabel, Gary J. et al., "Direct Gene Transfer with DNA-Liposome Complexes in Melanoma: Expression, Biologic Activity and Lack of Toxicity in Humans," <i>Proc. Natl. Acad. Sci. USA</i> , December 1993, 90:11307-11. (Exhibit 29)
		Zhu, Ning et al., "Systemic Gene Expression After Intravenous DNA Delivery into Adult Mice," <i>Science</i> , July 9, 1993, 261:209-11. (Exhibit 30)
		Felgner, Phillip L. et al., "Lipofection: A Highly Efficient, Liquid-Mediated DNA-Transfection Procedure," <i>Proc. Natl. Acad. Sci. USA</i> , November 1987, 84:7413-7. (Exhibit 31)
		Singhal, Arun and Leaf Huang, "Gene Transfer in Mammalian Cells Using Liposomes as Carriers," <i>Gene Therapeutics: Methods and Applications of Direct Gene Transfer</i> , Jon A. Wolff, ed., Birkhauser Boston, 1994, 118-42. (Exhibit 32)
		Behr, Jean Paul, "Gene Transfer with Synthetic Cationic Amphiphiles: Prospects for Gene Therapy," <i>Bioconjugate Chemistry</i> , 1994, 5:382-9. (Exhibit 33)
		Felgner, P. L. and G. Rhodes, "Gene Therapeutics," <i>Nature</i> , 349:351-2. (Exhibit 34)
		Mulligan, Richard C., "The Basic Science of Gene Therapy," <i>Science</i> , May 14, 1993, 260:926-32. (Exhibit 35)
TICP		Crystal, Ronald G., "Transfer of Genes to Humans: Early Lessons and Obstacles to Success," <i>Science</i> , October 20, 1995, 270:404-10. (Exhibit 36)

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Manning, Gerald S., "Limiting Laws and Counterion Condensation in Polyelectrolyte Solutions I. Colligative Properties," *The Journal of Chemical Physics*, August 1, 1969, 51(3):924-33. (Exhibit 38)

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A circular stamp from the Office of Intellectual Property (OIP). The text "OIP" is at the top, "DEC 7 1999" is in the center, and "PATENT & TRADEMARK OFFICE" is at the bottom. The number "JC50" is written to the right of the stamp.

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